Amendments to the Specifications

Please cancel the following, which were added in the reply of March 4, 2004 to the final Office Action dated June 3, 2003:

On page 4, please cancel the following two new paragraphs inserted starting at line 19:

Fig. 4 in a schematic representation, a first embodiment of an optical arrangement according to the invention, whereby the pinhole has a square passageway and the pinhole receives light from a confocal microscope; and,

Fig. 5 in a schematic representation, a second embodiment of an optical arrangement according to the invention, whereby the pinhole has a square passageway and the pinhole receives light from a confocal microscope.

On page 4, please cancel the following amendment to lines 19 and 20:

Figures 1 through [[3]]5 show an optical arrangement for the spectral fanning out of a light beam 1,

On page 5, please cancel the following two new paragraphs inserted starting on line 24:

Fig. 4 illustrates a first embodiment of an optical arrangement according to the invention, whereby the pinhole receives light from a confocal microscope. Light source 25 emits light beam 1, which traverses lens 23 and sample 21. Light transmitted through and emitted from the sample is incident on pinhole 7.

Fig. 5 illustrates a second embodiment of an optical arrangement according to the invention, whereby the pinhole receives light from a confocal microscope. Light source 25 emits light beam 1, which passes through beam splitter 27, traverses lens 23, and is incident on sample 21. Light reflected by and emitted from the sample is reflected by beam splitter 27 and is incident on pinhole 7.

On page 5, please add the following paragraph starting on line 24:

Figure 3 shows the splitting of fanned out beam 2 by gap/detector arrangement 12. Detection gaps 6A and 6B each include a plurality of locations at which fanned out beam 2 strikes, for example, locations 6C, 6D, and 6E in detection gap 6A and locations 6F, 6G, and 6H in detection gap 6B. Locations 6C and 6D, and 6F and 6G, on gap detectors 6A and 6B, respectively, are reflective surfaces. That is, those portions of fanned out beam 2 striking these surfaces are reflected, as shown in Figure 3. Locations 6E and 6H are gaps in gap detectors 6A and 6B, respectively, and pass those portions of fanned out beam 2 striking locations 6E and 6H, as shown in Figure 3.

Thus, detection gap 6A passes spectral range 4A, a first range of fanned out beam 2, striking gap 6E. Detector 5A detects at least a portion of spectral range 4A. Detection gap 6A also reflects, to detector gap 6B, that portion of fanned out beam 2 striking reflective locations 6C and 6D. Spectral range 4B, a second range of fanned out beam 2, is formed by the portion of fanned out beam 2 reflected by detection gap 6A and striking gap 6H in detection gap 6B. Thus, detection gap 6B passes spectral range 4B. Detector 5B detects at least a portion of spectral range 4B.

On page 6, please amend line 6 as follows:

4A spectral range

On page 6, please add the following at line 7:

4B spectral range

On page 6, please amend line 7 as follows:

5A detector

On page 6, please add the following at line 8:

5B detector

6A detection gap

6B detection gap

6C detection gap reflective location

6D detection gap reflective location

6E detection gap, gap location

6F detection gap reflective location

6G detection gap reflective location

On page 6, please amend line 8 as follows:

6H detection gap, gap location

Amendments to the Drawings

Please replace Figure 2 and Figure 3 with attached replacement Figure 2 and replacement Figure 3, respectively. Per the Examiner's suggestion in the April 21, 2004 Office Action, Applicants have added a rectangular box adjacent each respective reference numeral (8) in the figures and labeled each box as "confocal microscope."

Per a June 8, 2004 telephone conference with the Examiner, detectors 5 have been labeled detectors 5A and 5B to provide antecedent basis for the structure and language of Claims 34-38. Likewise, detection gaps 6 in Figure 3 have been changed to detection gaps 6A and 6B, and locations 6C through 6H have been added to provide antecedent basis for the structure and language of Claims 34-38.

Please cancel new Figures 4 and 5, which were added in the reply of March 4, 2004 to the final Office Action dated June 3, 2003.